Claims

1. A method for coding a structured, in particular XML-based, document, with which a plurality of codes are generated by means of one or more name spaces (NS1 .. NS4) and allocated for types defined by means of name spaces (NS1 .. NS4), characterized in that
a subset (TM) comprising addressable types of a name space (NS2) is determined based on an initial basic type (OBT) on the basis of an inheritance relationship (BT1 .. BT3) between the name spaces (NS1 .. NS4) and the inheritance relationships in a name space of the basic type (OBT) and the inheritance relationships in the name space of the subset (TM).

2. The method for coding a structured, in particular XML-based, document, as claimed in the preamble of claim 1 or as claimed in claim 1,
characterized in that
for each name space an assignment to further name spaces is carried out such that at least one assignment information item (NAMESPACE_ID, TYPECODE) is generated such that at least one inheritance relationship (BT1 .. BT3) is described between an inheriting name space (NS2) and bequeathing name spaces (NS1, NS3, NS4).

3. The method as claimed in claim 2,
characterized in that
the assignment information of the inheriting name space (NS2) is formed from a list of codes (TYPECODES) of the basic types (LBT, LBT') of header types (HT) of the inheriting name space, with basic types (LBT, LBT') being types, from which the header type (HT) originates directly (LBT) or from which a header type (HT') originates, which in turn is the basic type

of a header type (HT) of the inheriting space (NS2) (LBT').

4. The method as claimed in claim 3,
characterized in that
the addressable subset (TM) is determined based on an initial basic type (OBT) by establishing the basic types (LBT, LBT') of the bequeathing name space (NS1).

5. The method as claimed in claim 4,
characterized in that
a) based on the initial basic type (OBT) for determining the subset (TM), header types (HT) are determined in the inheriting name space (NS2), for which basic types (LBT, LBT') are identified from the bequeathing name space (NS1) by means of the assignment information (NAMESPACE_ID, TYPECODE),
b) the initial basic type (OBT) is a basic type of the basic types (LBT, LBT') of the bequeathing name space (NS1).

6. The method as claimed in one of the preceding claims,
characterized in that
the assignment information (NAMESPACE_ID, TYPECODE) assigned to the inheriting name spaces (NS2) is stored together with the respective name space (NS2) in a first device carrying out the coding and/or decoding.

7. The method as claimed in claim 6,
characterized in that
the assignment information (NAMESPACE_ID, TYPECODE) assigned to the inheriting name spaces (NS2) is generated in a second device and transmitted together with the respective name space (NS1, NS2) in a first device carrying out the coding and/or decoding.

8. The method as claimed in one of the preceding claims, characterized in that
respectively separate codes, which are independent of other schemas and/or name spaces, for the elements defined and/or declared in the schemas and/or name spaces and/or in the groups of schemas and/or name spaces, are allocated for a schema and/or a name space and/or for a group of schemas and/or name spaces.

9. The method as claimed in claim 8, with which, to identify the schema and/or name space and/or the group of schemas and/or name spaces the separate codes are sub-divided into corresponding address areas.

10. The method as claimed in one of claims 8 to 9, with which the separate codes respectively comprise a local code relating to the schema and/or the name space and/or relating to the group of schemas and/or name spaces and an identification code to identify the schema and/or name space and/or the group of schemas or name spaces.

11. The method as claimed in one of claims 8 to 10, with which separate codes are generated for global elements and/or substitution groups and/or data types.

12. The method as claimed in claim 11, with which separate codes are generated for data types type codes such that within the inheritance tree of a name space the data type adjacent to a first data type in the same name space is at a code interval in respect of the first data type, said code interval corresponding to the number of data types derived from the first data type in this name space.

13. The method as claimed in one of claims 8 to 12, with which the separate codes within a given name space are allocated according to a method, which comprises the following steps:
- in a first step all data types of a name space, which were bequeathed from data types of other name spaces, are sorted in a list in the sequence of global type codes of the respective basic data types as defined in the MPEG-7 standard, the basic data types being the data types in other name spaces, from which the sorted data types were bequeathed;
- in a second step those data types of a name space, which were bequeathed from a specific basic data type of a specific other name space, are sorted lexicographically in each instance;
- in a third step all the data types of a name space, which were not bequeathed from a data type of another name space, are sorted according to the sequence defined in the MPEG-7 standard into the existing list of data types;
- in a fourth step the separate codes are allocated in list sequence to the data types of the name space.

14. A method for decoding a structured document, in particular an XML-based document, the method being configured such that a document coded according to a method as claimed in one of the preceding claims is decoded.

15. The method as claimed in claim 14 for decoding a document coded according to the method as claimed in claim 12, with which, to decode a binary type code, the code length of the separate codes of the binary type codes is determined from the number of derived data types.

16. The method as claimed in claim 14 or 15 for decoding a document coded according to the method as claimed in claim 5, with which, to decode a specific type code, the sub-tree of the inheritance tree of the name space, in which the specific type code is located, is determined from the code intervals between adjacent data types.

17. A method for decoding a structured document, in particular an XML-based document, the method being configured such that a document coded according to a method as claimed in one of the preceding claims is decoded.

18. The method as claimed in claim 17 for decoding a document coded according to the method as claimed in claim 12, with which, to decode a binary type code, the code length of the separate codes of the binary type codes is determined from the number of derived data types.

19. The method as claimed in claim 17 or 18 for decoding a document coded according to the method as claimed in claim 12, with which, to decode a specific type code, the sub-tree of the inheritance tree of the name space, in which the specific type code is located, is determined from the code intervals between adjacent data types.

20. The method as claimed in claim 17 to 19 for decoding a document coded according to the method as claimed in claim 12, with which, to determine the basic types (LBT, LBT'), which originate from an initial basic type (OBT) [lacuna] is determined from the code intervals between adjacent data types.

21. The method as claimed in claim 17 to 20 for decoding a document coded according to the method as claimed in claim 12, with which, to determine the number of types in the subset TM [lacuna] is determined based on the header types (HT) from the code intervals between adjacent header types (HT).

22. A coding device, which is configured such that a coding method as claimed in one of claims 1 to 13 can be implemented.

23. A decoding device, which is configured such that a decoding method as claimed in one of claims 14 to 21 can be implemented.

24. A coding and decoding device comprising a coding device as claimed in claim 22 and a decoding device as claimed in claim 23.